

AMENDMENTS

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed is:

1. (currently amended) A method for collecting image data with a camera at a remote location[, selecting] and transmitting [data to selected stations on a] over an internet protocol network[, the] transmitted data, the transmitted data including at least one of [a] compressed digital still image data and compressed digital motion video data, the method comprising the steps of:

collecting image data [based on an event occurring] with the camera at the remote location, the collected image data ~~being related to a scene, the collected data including an image signal, the collected data defining an original scene, the data being collected on a preselected basis including~~ uncompressed digital pixel data, the uncompressed digital pixel data including uncompressed digital pixel data of an original scene, the uncompressed digital pixel data including uncompressed digital pixel data of a subsequent scene, the uncompressed digital pixel data of the original scene being collected before the uncompressed digital pixel data of the subsequent scene;

~~at the remote location generating from the collected data motion histogram values for regions of the scene, the motion histogram values suitable for graphically depicting~~ comparing at the remote location the uncompressed digital pixel data of the original scene and the uncompressed digital pixel data of the subsequent scene to provide at least one motion difference value, the at least one motion difference value representing magnitude of

~~sensed scene changes over time change between the uncompressed digital pixel data of the original scene and the uncompressed digital pixel data of the subsequent scene;~~

~~generating a prioritized signal indicating a priority, the prioritized signal including time and location of an event, the prioritized signal being generated by comparing at the camera a subsequent scene to the original scene, the prioritized signal being generated in response to a modification of the original scene;~~

~~transmitting over the internet protocol network to a receiving station the transmitted data, the transmitted data being transmitted over the internet protocol network if the [prioritized signal] at least one difference value meets [a] at least one threshold value [indicating] , the at least one threshold value relating to modification of the original scene, transmitting the prioritized signal to a receiving station located on a network, the transmitted data [prioritized signal] including at least one difference value and an image component, the image component including at least one of the following:~~

~~_____ compressed digital still image data of the subsequent scene, and
_____ compressed digital motion video data of the subsequent scene; and~~

~~managing the transmitted prioritized signal at the receiving station displaying at the receiving station transmitted data, the display of transmitted data including: a graphical representation of the at least one difference value, and at least one of the following:~~

~~_____ compressed digital still image data of the subsequent scene, and
_____ compressed digital motion video data of the subsequent scene.~~

2. (canceled).

3. (canceled).

4. (canceled).

5. (canceled).

6. (currently amended) The method of claim [5,] 1 and further comprising:
wherein [the data is in the form of digital pixels and wherein the comparing step
comprises] comparing includes identifying change information, the change
information including only [those pixels] digital pixel data altered from the
original scene.

7. (currently amended) The method of claim [6, further comprising] 6 and further
comprising:
[the step of] generating a change histogram from the change information
[created in the comparing step].

8. (currently amended) The method of claim [4,] 1 and further comprising:
[the step of] masking [specific regions of the] a region of a scene in order
to [ignore changes] avoid comparing uncompressed digital pixel data in
said region.

9. (currently amended) The method of claim [4, and further including the step of]
1 and further comprising:
tagging [each transmitted image] with unique identifying data the
transmitted data.

10. (currently amended) The method of claim 9[,] and further comprising:
wherein [the] tagging [step] is performed at the remote location.

11. (currently amended) The method of claim 9[, and further comprising:
wherein the identifying data includes [the] a date and time of [the data of
defining a] the subsequent scene.
12. (currently amended) The method of claim [9, further] 9 and further
comprising:
wherein the identifying data further includes [the] a duration of the [data
defining a] subsequent scene.
13. (currently amended) The method of claim [11, further] 11 and further
comprising:
[including a plurality of cameras and] wherein the identifying data
further includes a camera identifier.
14. (currently amended) The method of claim [4, further including] 1 and further
comprising:
displaying the transmitted data on a visual [monitor] display at the remote
location, ~~the transmitted data be selectively displayed at the monitor.~~
15. (currently amended) The method of claim 14[, and further comprising:
wherein the transmitted data is displayed [at the monitor] in near real-time.
16. (currently amended) The method of claim 14[, further including] and further
comprising:
[the step of] tagging [each transmitted image] the transmitted data with
unique identifying data.
17. (currently amended) The method of claim 16[, and further comprising:
[wherein] displaying with the transmitted data the unique identifying data
is displayed with the displayed data.

18. (currently amended) The method of claim 17[,] and further comprising:
[wherein the monitor further includes] displaying with the transmitted data a map [of the scene].
19. (currently amended) The method of claim 18[, further including] and further comprising:
[a plurality of cameras and wherein] displaying on the map an icon representing each [camera is provided on the map] of a plurality of cameras.
20. (currently amended) The method of claim 19[, further including] and further comprising:
[an indicator that is activated] activating a camera indicator when [the] transmitted data from a [specific] corresponding camera is displayed [on the monitor and deactivated at other times].
21. (currently amended) The method of claim [4,] 1 and further comprising:
[the step of] storing the transmitted data at the remote location.
22. (currently amended) The method of claim 21[, further including] and further comprising:
[the step of] retrieving from the remote location [the data from] the stored transmitted data [on command].
23. (currently amended) The method of claim 22[, further including] and further comprising:
[the step of] tagging [each transmitted image] with unique identifying data the transmitted data.

24. (currently amended) The method of claim 23[,] and further comprising:
wherein the tagging [step] is performed at the remote location.
25. (currently amended) The method of claim 23[,] and further comprising:
wherein the identifying data includes [the] a date and time of [the data of
defining a] the subsequent scene.
26. (currently amended) The method of claim 25[, further] and further
comprising:
wherein the identifying data further includes [the] a duration of the [data
defining a] subsequent scene.
27. (currently amended) The method of claim 25[, further including] and further
comprising:
[a plurality of cameras and] wherein the identifying data further includes a
camera identifier.
28. (currently amended) The method of claim 1 and further comprising:
[, wherein the managing step comprises] managing the transmitted data at
the receiving station, wherein managing includes generating an alarm at
the receiving station.
29. (currently amended) The method of claim 1 and further comprising:
[, wherein the managing step comprises] displaying the transmitted
[signal] data at the receiving station.
30. (currently amended) The method of claim 1 and further comprising:
[, wherein the managing step comprises] generating an alarm and
displaying the transmitted [signal] data at the receiving station.

31. (currently amended) The method of claim 1 and further comprising:
[, wherein the managing step comprises] storing the transmitted [signal]
data at the receiving station.

Claims 32-58 (canceled).

59. (currently amended) The method of claim [3, including the steps of] 1 and
further comprising:
training the camera on an access control system at a facility at the remote
location;
capturing [an] image data of personnel attempting to gain access to a
facility through [an] the access control system; and
logging all [successful] entry attempts[, in log data, the log data
identifying all successful entry attempts and all unsuccessful entry
attempts.

60. (currently amended) The method of claim [21, including the step of] 59 and
further comprising:
searching the [database by] stored transmitted data for any combination of
stored transmitted data ~~specific individual, class of individual, by~~
~~successful accesses, by unsuccessful accesses, by specific portal of entry~~
~~with qualifiers of time, day, and location.~~

61. (currently amended) The method of claim 60 [including the step of] and
further comprising:
[providing an image] retrieving stored transmitted data and log data[, the
stored transmitted data including of [those] personnel attempting to gain
access to a facility through along with the results of a search of the
database by any of a specific individual, class of individual, by successful
accesses, by unsuccessful accesses, by specific portal of entry with
qualifiers of time, day, location].

62. (currently amended) The method of claim 1[,] and further comprising:
wherein [the] collecting [step] includes collecting event data at [a] the
remote location; identifying the event data;
prioritizing the event data[.] based on an event prioritization hierarchy to
provide an event data priority; and
wherein the transmitting [step] includes selectively transmitting the
transmitted data [to selective monitoring stations on a network] based on
[an event prioritization hierarchy] the event data priority.
63. (currently amended) The method of claim 62[, including the step of] and
further comprising:
[comparing data generated at a remote location to determine] determining
the occurrence of an event by comparing at least one of the following:
the uncompressed digital pixel data of the original scene and the
uncompressed digital pixel data of the subsequent scene, the at least one
motion difference value and the at least one threshold value, compressed
digital still image data of the subsequent scene and compressed digital still
image data of the original scene, compressed digital motion video data of
the subsequent scene and compressed digital motion video data of the
original scene [and the transmitting step further includes the data to a
selective monitoring station indicating the occurrence of an event].
64. (currently amended) The method of claim 1[,] and further comprising:
wherein the collecting [step] includes collecting [video and still images of
a scene and wherein the transmitting step includes transmitting any change
in the scene in near real-time to a remote location] both digital still image
data and digital motion video data.

65. (currently amended) The method of claim 1[, further including the step of] and further comprising:

[further including the step of] compressing the [data] uncompressed digital pixel data of the subsequent scene prior to [the] transmitting [step].

66. (currently amended) The method of claim 65[,] and further comprising:

wherein [the] compressing [step] further includes [minimizing the amount of data] prior to compressing reducing in amount the uncompressed digital pixel data of the subsequent scene [data] to be compressed [transmitted] without any loss of critical change data.

67. (currently amended) The method of claim 1[, further including the steps of] and further comprising:

defining [the data in] blocks of data including at least one of the uncompressed digital pixel data and the compressed digital pixel data; [and] tagging [each block] the blocks of data with a unique identifier [for enhancing storage, search and retrieval].

68. (currently amended) The method of claim 6[, including the step of] and further comprising:

quantifying the [amount of] change information [between scenes].

69. (currently amended) The method of claim 6[, including the steps of] and further comprising:

[quantifying the amount of change between scenes and reporting such as an indication of] providing a level of motion indicator quantifying the change information.

70. (currently amended) The method of claim 6[, including the step of] and further comprising:

[ignoring anticipated or minimal changes in a scene by] applying pre-selected criteria to cause anticipated change information to be disregarded.

71. (currently amended) The method of claim 6[, including the step of] and further comprising:

blocking [of specified regions] at least one region of a scene to [further enhance the monitoring, transmission and definition of the changes in the scene of a frame-to-frame basis] cause change information to be disregarded when identifying change information.

72. (currently amended) The method of claim 1[, and further comprising:

[wherein] managing the transmitted data at the receiving station by [step further includes the step of] correlating correlate motion between at least two [or more] cameras to determine if a motion detection event [should be] is identified [in order to eliminate false alarms].

73. (currently amended) The method of claim 1[, further including the step of] and further comprising:

controlling [all] functions [and steps] from a [single interactive monitor] screen display.

74. (currently amended) The method of claim 73[, including the step of] and further comprising:

providing simultaneous access for at least two [or more monitor screens] screen displays each allowing functions [of the system] to be controlled [by that interactive monitor].

75. (currently amended) The method of claim 6[, including the step of] and further comprising:

detecting the appearance or disappearance of an object.

76.-77. (canceled)

78.-89. (withdrawn)

90. (currently amended) A camera adapted to be connected to a packet switching network, the camera being adapted to capture a time series of still frame images in a field of view, the time series of still frame images corresponding respectively to a time series of scenes in the field of view, the camera being adapted to transmit over the packet switching network sequences of data packets, certain of the sequences each including a respective compressed set of digitized pixel data, each compressed set of digitized pixel data representing a respective still frame image, the camera comprising:

a digital encoder adapted to produce digitized pixel data in digital format, the digital encoder being operable to produce a first set of digitized pixel data representing a first still frame image of a first scene, the digital encoder being operable to produce a second set of digitized pixel data representing a second still frame image of a second scene, the first scene preceding the second scene in the field of view;

a memory adapted to store the first set of digitized pixel data;

a difference algorithm embodied in suitable media, the difference algorithm when executed being adapted to produce a set of pixel difference values, the set of pixel difference values being calculated by comparison of digitized pixel data selected from the first set of digitized pixel data with corresponding digitized pixel data selected from the second set of digitized pixel data, a selected set of pixel difference values being compared to at

least one threshold value, comparison of the selected set of pixel difference values and the at least one threshold value providing an indicator, the indicator in at least one potential circumstance providing indication of an event;

a compression algorithm embodied in suitable media, the compression algorithm being executable to compress the second set of digitized pixel data only when the indicator provides indication of the event, the compression algorithm when executed being adapted to compress the second set of digitized pixel data to produce a compressed second set of digitized pixel data; and

the camera being adapted to send over the packet switching network in a second sequence of data packets the compressed second set of digitized pixel data and at least one of the following:

the selected set of pixel difference values and the indicator, the second sequence of data packets being sent over the packet switching network only when the indicator provides indication of the event.

91. (previously presented) A camera according to claim 90 and further comprising:

the difference algorithm when executed being adapted to produce a histogram, the histogram summarizing a selected set of pixel difference values;

the camera being adapted to send over the packet switching network in a sequence of data packets a set of data representing the histogram.

92. (previously presented) A camera according to claim 91 and further comprising:

the histogram including a set of indicator bar values, each indicator bar value corresponding to a respective region of the field of view, each indicator bar value representing a selected set of pixel difference values in the respective region.

93. (previously presented) A camera according to claim 92 and further comprising:

each indicator bar value representing a count of a selected set of pixel difference values each exceeding a threshold value in the respective region.

94. (previously presented) A camera according to claim 90 and further comprising:

at least one comparison value being derived from the selected set of pixel difference values, comparison of the at least one comparison value and the at least one threshold value providing the indicator.

95. (previously presented) A camera according to claim 90 and further comprising:

a processor adapted to drive execution of at least the difference algorithm.

96. (previously presented) A camera according to claim 90 and further comprising:

a memory adapted to store the second set of digitized pixel data.

97. (previously presented) A camera according to claim 90 and further comprising:

the difference algorithm being embodied in media which includes executable software.

98. (previously presented) A camera according to claim 90 and further comprising:

the compression algorithm being embodied in media which includes an application specific integrated circuit.

99. (previously presented) A camera according to claim 90 and further comprising:

the camera being adapted to send over the packet switching network in a sequence of data packets a set of data representing the histogram and the compressed second set of digitized pixel data, such that a recipient monitoring station can display for viewing the histogram, the compressed second set of digitized pixel data.

100. (previously presented) A camera according to claim 90 and further comprising:

a compression algorithm embodied in suitable media, the compression algorithm when executed being adapted initially to compress the first set of digitized pixel data to produce a compressed first set of digitized pixel data;

the camera being adapted initially to send over the packet switching network in a first sequence of data packets the compressed first set of

digitized pixel data, the first sequence of data packets when sent over the packet switching network preceding the second sequence of data packets.

101. (previously presented) A camera according to claim 90 and further comprising:

a network interface adapted to transmit over the packet switching network sequences of data packets, the network interface including a network stack adapted to produce data packets.

102. (currently amended) A camera adapted to be connected to a packet switching network, the camera being adapted to capture a time series of still frame images in a field of view, the time series of still frame images corresponding respectively to a time series of scenes in the field of view, the camera being adapted to transmit over the packet switching network sequences of data packets, certain of the sequences each including a respective compressed set of digitized pixel data, each compressed set of digitized pixel data representing a respective still frame image, the camera comprising:

a digital encoder adapted to produce digitized pixel data in digital format, the digital encoder being operable to produce a first set of digitized pixel data representing a first still frame image of a first scene, the digital encoder being operable to produce a second set of digitized pixel data representing a second still frame image of a second scene, the first scene preceding the second scene in the field of view;
memory adapted to store the first set of digitized pixel data and the second set of digitized pixel data;

a processor adapted to drive execution of the difference algorithm;

a difference algorithm embodied in media, the media including executable software, the difference algorithm when executed being adapted to produce a set of pixel difference values, the set of pixel difference values being calculated by comparison of digitized pixel data selected from the first set of digitized pixel data with corresponding digitized pixel data selected from the second set of digitized pixel data, a selected set of pixel difference values being compared to at least one threshold value, comparison of the selected set of pixel difference values and the at least one threshold value providing an indicator, the indicator in at least one circumstance providing indication of an event, the difference algorithm when executed being adapted to produce a histogram, the histogram

summarizing a selected set of pixel difference values, the histogram including a set of indicator bar values, each indicator bar value corresponding to a respective region of the field of view, each indicator bar value representing a selected set of pixel difference values in the respective region;

a compression algorithm embodied in at least one application specific integrated circuit, the compression algorithm being executable when the indicator provides indication of the event, the compression algorithm when executed being adapted to compress the second set of digitized pixel data to produce a compressed second set of digitized pixel data; and

the camera being adapted to send over the packet switching network in a second sequence of data packets the compressed second set of digitized pixel data and at least one of the following:

the selected set of pixel difference values, the indicator, and a set of data representing the histogram,

the second sequence of data packets being sent over the packet switching network only when the indicator provides indication of the event, the camera being adapted to send over the packet switching network in a sequence of data packets a set of data representing the histogram, such that a recipient monitoring station can display for viewing the histogram and the compressed second set of digitized pixel data.

103. (previously presented) A camera according to claim 102 and further comprising:

each indicator bar value representing a count of a selected set of pixel difference values each exceeding a threshold value in the respective region.

104. (previously presented) A camera according to claim 102 and further comprising:

at least one comparison value being derived from the selected set of pixel difference values, comparison of the at least one comparison value and the at least one threshold value providing the indicator.

105. (previously presented) A camera according to claim 102 and further comprising:

a compression algorithm embodied in suitable media, the compression algorithm when executed being adapted initially to compress the first set of digitized pixel data to produce a compressed first set of digitized pixel data;

the camera being adapted initially to send over the packet switching network in a first sequence of data packets the compressed first set of digitized pixel data, the first sequence of data packets when sent over the packet switching network preceding the second sequence of data packets.

106. (previously presented) A camera according to claim 90 and further comprising:

a network interface adapted to transmit over the packet switching network sequences of data packets, the network interface including a network stack adapted to produce data packets.

107. (previously presented) A camera according to claim 106 and further comprising:

a compression algorithm embodied in suitable media, the compression algorithm when executed being adapted to compress the first set of digitized pixel data to produce a compressed first set of digitized pixel data;

the camera being adapted to initially send over the packet switching network in a first sequence of data packets the compressed first set of digitized pixel data, the first sequence of data packets preceding the second sequence of data packets.